

**WE CLAIM:**

1. Use of an isolated polynucleotide sequence encoding at least 200 amino acids having a sequence found in SEQ ID NO: 1 in the preparation of a medicament useful in the modulation of polysaccharide adhesin synthesis.
2. Use of claim 1 wherein the polynucleotide sequence is a DNA sequence.
3. Use of claim 1 wherein the polynucleotide sequence is a RNA sequence.
4. Use of an isolated polynucleotide sequence encoding at least 200 amino acids having a sequence found in SEQ ID NO: 2 in the preparation of a medicament useful in the modulation of polysaccharide adhesin synthesis.
5. Use of claim 4 wherein the polynucleotide sequence is a DNA sequence.
6. Use of claim 4 wherein the polynucleotide sequence is a RNA sequence.
7. Use of an isolated polynucleotide sequence encoding at least 200 amino acids having a sequence found in SEQ ID NO: 3 in the preparation of a medicament useful in the modulation of polysaccharide adhesin synthesis.
8. Use of claim 7 wherein the polynucleotide sequence is a DNA sequence.
9. Use of claim 7 wherein the polynucleotide sequence is a RNA sequence.
10. Use of an isolated amino acid sequence comprising at least 200 amino acids having a sequence found in at least one of SEQ ID NOs: 1, 2 or 3 in modulating polysaccharide adhesin synthesis by biofilm-producing bacteria.
11. Use of claim 10 wherein the sequence is a sequence found in SEQ ID NO: 1.
12. Use of claim 10 wherein the sequence is a sequence found in SEQ ID NO: 2.

13. Use of claim 10 wherein the sequence is a sequence found in SEQ ID NO: 3.
14. A method of identifying inhibitors of a product of the ycdSRQP operon, comprising selecting the product, assaying the activity of that product under controlled conditions, adding a potential inhibitor of the product, assaying the activity of the product in the presence of the potential inhibitor, and ascertaining whether the presence of the proposed inhibitor resulted in an inhibition of the function of that product.
15. The method of claim 14 wherein the product of the ycdSRQP operon is ycdQ.
16. The method of claim 14 wherein the product of the ycdSRQP operon is ycdR.
17. The method of claim 14 wherein the product of the ycdSRQP operon is ycdS.
18. A method of reducing the rate of conversion of UDP-GlcNAc to  $\beta$ -1,6-GlcNAc polymeric units in an environment containing biofilm-producing bacteria, comprising reducing the expression of a product of the ycdSRQP operon.
19. The method of claim 18 wherein the product of the ycdSRQP operon is YcdQ.
20. The method of claim 18 wherein the product of the ycdSRQP operon is YcdR.
21. The method of claim 18 wherein the product of the ycdSRQP operon is YcdR.
22. A method of inhibiting polysaccharide deacetylation by reducing YcdR activity.
23. The method of claim 22 wherein YcdR activity is reduced in *E. coli*.
24. A method of inhibiting adhesin transport in biofilm-producing bacteria

comprising reducing YcdR activity.

25. The method of claim 24 wherein the biofilm-producing bacteria is *E. coli*.
26. A method of reducing extracellular adhesin binding in biofilm-producing bacteria, comprising reducing YcdS activity.
27. Use of an inhibitor of a product of the ycdSRQP operon in improving the response of a mammalian patient suffering from a bacterial infection to antibiotics for treatment of said bacterial infection.
28. Use of claim 27 wherein the mammalian patient is a human.
29. Use of an inhibitor of the expression of a product of the ycdSRQP operon in facilitating the reduction of bacterial load in a mammalian patient suffering from bacterial infection by biofilm-forming bacteria.
30. Use of claim 29 wherein the mammalian patient is a human.
31. The method of claim 18 wherein the biofilm-producing bacteria includes *E. coli*.
32. A method of decreasing cell to cell biofilm links in biofilm-forming bacteria, comprising reducing YcdS activity.
33. A method of reducing adhesin synthesis in biofilm-forming bacteria, by reducing YcdQ activity.
34. A method of reducing  $\beta$ -1,6-N-acetylglucosamine polymer synthesis by reducing YcdQ activity.
35. A method of reducing glycosyltransferase activity in biofilm-forming bacteria, comprising reducing YcdQ activity.

36. The method of claim 32 wherein the biofilm-forming bacteria is at least one of *E. coli* or *Staphylococcus*.
37. An isolated polynucleotide sequence encoding at least 200 amino acids having a sequence found in SEQ ID NO: 1.
38. The polynucleotide sequence of claim 37 wherein the polynucleotide sequence is a DNA sequence.
39. The polynucleotide sequence of claim 37 wherein the polynucleotide sequence is a RNA sequence.
40. An isolated polynucleotide sequence encoding at least 200 amino acids having a sequence found in SEQ ID NO: 2.
41. The polynucleotide sequence of claim 40 wherein the polynucleotide sequence is a DNA sequence.
42. The polynucleotide sequence of claim 40 wherein the polynucleotide sequence is a RNA sequence.
43. An isolated polynucleotide sequence encoding at least 200 amino acids having a sequence found in SEQ ID NO: 3.
44. The polynucleotide sequence of claim 43 wherein the polynucleotide sequence is a DNA sequence.
45. The polynucleotide sequence of claim 43 wherein the polynucleotide sequence is a RNA sequence.